

Orion® ShortTube™ 80 Optical Tube Assembly

#9948



Figure 1. The ShortTube 80 Optical Tube Assembly

Congratulations on your purchase of the Orion ShortTube 80 Optical Tube Assembly! This fine-quality versatile instrument can be used for a wide variety of applications. Compact, portable, and easy to use, this telescope will provide many hours of enjoyment for novice and experienced astronomers alike.

The Short Tube 80 Optical Tube Assembly (OTA) arrives from the factory fully assembled and collimated. No adjustments should need to be made to the optics. Please keep the original shipping box in the unlikely event you should need to ship the telescope back to Orion for warranty repair service. The box also makes a very good container for storing the telescope when it is not in use.

The Orion ShortTube 80 can be outfitted for nighttime stargazing, daytime terrestrial observation, as a guidescope for astroimaging, or as a telephoto lens attached to an SLR/DSLR camera body.

Attaching a Finder Scope

An Orion finder scope can be attached to the ShortTube 80 to provide a low power, wide field view helpful in aiming the telescope. Your finder scope bracket can be mounted in the dovetail shoe molded into the focuser assembly. Loosen the finder scope lock knob and slide the dovetail foot of your finder bracket in place. Secure it by re-tightening the lock knob.



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Focusing the Telescope

The ShortTube 80 OTA is outfitted with a 1.25" rack and pinion focuser. Once you have installed your equipment use the black plastic knobs to adjust the focus of your visual or photographic accessories. This will rack the drawtube in and out, changing the focal distance of the light path. To ensure the sharpest focus go slightly past your perceived focus point and then reverse directions until you have a sharp focus.

Visual Back

The ShortTube 80 OTA is equipped with a 1.25" visual back. You can attach 1.25" accessories by loosening the thumb-screw and inserting the barrel until it stops, then secure it in place by re-tightening the thumbscrew.

The male threads at the back of the tube are specified as T-threads. Any camera accessory with a T-thread such as many commercially available CCD and CMOS imagers and T-rings for SLR/DSLR camera bodies can be coupled to the Short Tube 80 by threading them on directly. This method is often preferred because it provides added stability for your accessories.

Care and Maintenance

If you give your ShortTube 80 reasonable care, it will last a lifetime. Store it in a clean, dry, dust-free place, safe from rapid changes in temperature and humidity. Keep the dust cover on the front of the telescope when it is not in use. The ShortTube 80 OTA requires very little mechanical maintenance. The optical tube is aluminum and has a smooth painted finish that is fairly scratch-resistant. If a scratch does appear on the tube, it will not harm the telescope. Smudges on the tube can be wiped off with a soft cloth and a household cleaner such as Formula 409.

Cleaning Lenses

Any quality optical lens cleaning tissue and optical lens cleaning fluid specifically designed for multi-coated optics can be used to clean the telescope's objective lens. Never use regular glass cleaner or cleaning fluid designed for eyeglasses.

Before cleaning with fluid and tissue, blow any loose particles off the lens with a blower bulb or compressed air. Then apply some cleaning fluid to a tissue, never directly on the optics. Wipe the lens gently in a circular motion, then remove any excess fluid with a fresh lens tissue. Oily fingerprints and smudges may be removed using this method. Use caution; rubbing too hard may scratch the lens. Clean only a small area at a time, using a fresh lens tissue on each area. Never reuse tissues.

Specifications

Objective lens:	Achromatic doublet, air-spaced
Objective lens coatings:	Fully multi-coated
Aperture:	80mm
Focal length:	400mm
Focal ratio:	f/5
Focuser:	Rack-and-pinion, 1.25", accepts camera T-ring
Optical tube length:	15"
Weight of optical tube assembly:	3 lbs., 7 oz.

One-Year Limited Warranty

The Orion ShortTube 80 OTA is warranted against defects in materials or workmanship for a period of one year from the date of purchase. This warranty is for the benefit of the original retail purchaser only. During this warranty period Orion Telescopes & Binoculars will repair or replace, at Orion's option, any warranted instrument that proves to be defective, provided it is returned postage paid to: Orion Warranty Repair, 89 Hangar Way, Watsonville, CA 95076. Proof of purchase (such as a copy of the original receipt) is required.

This warranty does not apply if, in Orion's judgment, the instrument has been abused, mishandled, or modified, nor does it apply to normal wear and tear. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. For further warranty service information, contact: Orion Customer Service (800) 676-1343; support@telescope.com.

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Customer Support Help Line (800) 676-1343 • Day or Evening